

CLAIMS

1. A surface mount-type vibration motor comprising a vibration motor body of which an output shaft end is attached with an eccentric weight and a motor holder that is installed to said vibration motor body to place said vibration motor body on a board, a part of said motor holder is bonded on said board using reflow solder, wherein said motor holder is formed by a metal sheet, has a motor holding section for covering a periphery of said vibration motor body to hold said vibration motor body and has motor support sections that extend in an axial direction of said output shaft over said board and are in contact with said board, and a connection section extending from said motor holding section to said motor support section that is bent in an arc shape having elasticity and is provided with openings.
2. A surface mount-type vibration motor according to Claim 1, wherein end sections of said motor support sections of said motor holder are provided with extended support sections that extend in an axial direction of said output shaft over said board and are in contact with said board, and distal ends of said extended support sections of said motor holder is positioned between the gravity center of said eccentric weight and the distal end of said eccentric weight in the axial direction of the said output shaft.
3. A surface mount-type vibration motor according to Claim 1 or 2, wherein said motor holding section of said motor holder is extended along the periphery of said vibration motor body in a cylindrical shape when installed to said vibration motor body, said motor support sections of said motor holder are provided with uniform plane sections extending in an axial direction of said motor holding section of said motor holder from periphery of said vibration motor body toward an outside.
4. A surface mount-type vibration motor according to Claims 1 through 3, wherein one end of said motor support section of said motor holder is provided with a first contact section that is in contact with said board and extends toward an inside of said vibration motor body soldered to said board, and another end of said motor support section of said motor holder is provided with a second contact section that is in contact with said board and extends toward said inside of said

vibration motor body soldered to said board.

5. A surface mount-type vibration motor according to Claim 4, wherein said first contact section and said second contact section are combined alternately on said board and are arranged to provide said combined portion with an opening.

6. A surface mount-type vibration motor according to any one of Claims 1 through 5, wherein an elastic holder for covering said vibration motor body is provided between said vibration motor body and said motor holding section.

7. A surface mount-type vibration motor according to any one of Claims 1 through 6, wherein said vibration motor body comprises a power supply terminal to be soldered to a power supply land provided to said board, and a part of said power supply terminal is provided with an elastic bending section.

8. A surface mount-type vibration motor comprising a vibration motor body of which an output shaft end is attached with an eccentric weight and a motor holder to be installed to said vibration motor body to place said vibration motor body on a board, and a part of said motor holder is bonded on said board using reflow solder, wherein said motor holder is provided with a motor holding section for covering a periphery of said vibration motor body to hold said vibration motor body and motor support sections that extend in an axial direction of said output shaft over said board and are in contact with said board and an uppermost portion of said motor holder for holding said vibration motor body at the position opposite to said motor holder is provided with an elastic support body.

9. A surface mount-type vibration motor according to Claim 8, wherein said vibration motor body comprises a power supply terminal to be soldered to a power supply land provided to said board and said power supply terminal comprises an elastic bending section.

10. An installation structure for a surface mount-type vibration motor, wherein the surface mount-type vibration motor, comprising a vibration motor body of which an output shaft end is attached with an eccentric weight and a motor holder that has a motor holding section for covering a periphery of said vibration motor body to hold said vibration motor body, a motor

support sections that extend in an axial direction of said output shaft over said board and are contact with said board, a connection section of said motor holder between said motor holding section and said motor support sections is formed by a metal sheet in an arc shape, said surface mount-type vibration motor is bonded to said board that is fixed between one of a pair of housing cases forming a frame body by fitting to each other and assembling them and an internal board using reflow solder, an elastic support body is arranged between said case of said pair and said surface mount-type vibration motor, and said surface mount-type vibration motor is held between an internal board and a housing case through said elastic support body by assembling said pair of housing cases.